WHAT IS CLAIMED IS:

1. A core wire for a guide wire comprising a body portion having a high rigidity and a tip end portion having a rigidity lower than the rigidity of the body portion, wherein at least part of said core wire is made of a copper-based alloy comprising 3-10 weight % of Al and 5-20 weight % of Mn, the balance being substantially Cu and inevitable impurities.

2. The core wire for a guide wire according to claim 1 wherein said copper-based alloy wire is formed by at least one of hot-working and cold-working, maintained at a temperature of at least 500°C and rapidly quenched, and then aged at a temperature of not more than 200°C such that the core wire has shape recovery properties and superelasticity.

3. The core wire for a guide wire according to claim 1 wherein said copper-based alloy wire comprises a high-rigidity body portion, a low-rigidity tip end portion, and an intermediate portion between said high-rigidity body portion and said low-rigidity tip end portion, said intermediate portion having rigidity continuously or stepwise decreasing from said high-rigidity body portion to said low-rigidity tip end portion.

4. The core wire for a guide wire according to claim 1 wherein said copper-based alloy wire is formed by hot working and cold working, maintained at a temperature of at

least 500°C and then rapidly quenched, and further subjected to an aging treatment comprising heating the high-rigidity body portion at a temperature of 250-350°C, heating the tip end portion at a temperature of less than 250°C, and an intermediate portion, and heating an intermediate portion between said body portion and said tip end portion at a temperature continuously or stepwise changing from the heating temperature of said body portion to the heating temperature of the tip end portion.

5. A guide wire comprising the core wire according to claim 1.

6. The guide wire according to claim 5 wherein said core wire is coated with a coating selected from the group consisting of Au, Pt, Ti, Pd, and TiN, and optionally with a resin.

7. A catheter at least partially comprising a metal pipe, said metal pipe being made in at least a tip end portion thereof of a copper-based alloy comprising 3-10 weight % Al and 5-20 weight % Mn, the balance being substantially Cu and inevitable impurities.

8. The catheter according to claim 7 wherein said metal pipe has a bending modulus which decreases continuously or stepwise in a direction from a base end to a tip end of the

catheter.

9. The catheter according to claim 7 wherein said metal pipe is formed by at least one of hot working and cold working, maintained at a temperature of at least 500°C and rapidly quenched, and then subjected to an aging treatment at a temperature distribution that decreases continuously or stepwise in a direction from a base end to a tip end of the catheter, wherein the highest temperature is 250-350°C and the lowest temperature is less than 250°C in said temperature distribution.

10. The catheter according to claim 7 wherein said metal pipe has an outer diameter which is at least partially decreasing continuously or stepwise in a direction from a base end to a tip end of said catheter.

11. The catheter according to claim 7 wherein said metal pipe is coated with a coating selected from the group consisting of Au, Pt, Ti, Pd, and TiN and optionally a resin.

12. A catheter containing a reinforcing metal member in at least part of a catheter tube, said reinforcing metal member being made of a copper-based alloy comprising 3-10 weight % Al and 5-20 weight % Mn, the balance being substantially Cu and inevitable impurities.

13. The catheter according to claim 12 wherein said reinforcing metal member has a bending modulus which decreases continuously or stepwise in a direction from a base end to a tip end of the catheter.

14. The catheter according to claim 12 wherein said reinforcing metal member is formed by at least one of hot working and cold working, maintained at a temperature of at least 500°C and then rapidly quenched, and then subjected to an aging treatment at such a temperature distribution that decreases continuously or stepwise in a direction from a base end to a tip end of said catheter, wherein the highest temperature in the temperature distribution is 250-350°C and the lowest temperature in the temperature distribution is less than 250°C.

15. The catheter according to claim 12 wherein said reinforcing metal member is at least one thin copper-based alloy wire extending along said catheter.

16. The catheter according to claim 12 wherein said reinforcing metal member is a braid of thin copper-based alloy wires.

17. The catheter according to claim 12 wherein said reinforcing metal member is a coil of a thin copper-based alloy wire.